Ñο.



9100045

<u>TO ALL TO WHOM THESE; PRESENTS SHALL COME;</u>

## Sunseeds Atd., A.P.

Colligrats. There has been presented to the

### Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED NOVEL VARIETY OF SEXUALLY REPRODUCED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE; IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLI-CANT(S) FOR THE TERM OF eighteen YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EX-CLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, IMPORTING IT, OR EXPORTING IT, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT

542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

TOMATO

'Sun 6095'

In Testimony Winexcot, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington, D.C.

31st day of January the year of our Lord one thousand nine hundred and ninety-two.

Hward Madigin

Public reporting burden for this collection of information is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Agriculture, Clearance Office, OIRN, Room 404-W, Washington, D.C. 20250; and to the Office of Management and Budget, Paperwork Reduction Project (OMB #0581-0055), Washington, 20250.

FORM APPROVED: OMB 10581-0055, Express 1/31/91

garage and a second respect to the second re	7033), Washington, 20230.	FORM P	(PPROVED: OME	1 U38 1-UU33, EXPIRES 1/3 1/91
U.S. DEPARTMENT OF AGRICULTURAL MARK	de	Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until		
(Instructions of APPLICANT(S) (as it is to appear on the Certificate)	n reverse)			ertificate is issued (7 U.S.C. 2426).
	2. TEMPORARY DESIGNA EXPERIMENTAL NO.	TION OR 3.	VARIETY NAME	
Sunseeds, Division of Westseeds, Inc.	Sunex 6095		Sun 6095	
4. ADDRESS (street and no. or R.F.D. no., city, state, and ZIP)	5. PHONE (Include area co	ode)	FOR OFFICIAL USE ONLY	
P.O. Box 1480			PV	PO NUMBER
2320 Technology Parkway, Suite 11A Hollister, CA 95023		(/00) (00 0505		9100045
HOLLISCEL, OA 95025		(408) 636–9505		F Date
				Dec. 13, 1990
6. GENUS AND SPECIES NAME	nical)		Time	
Lycopersicon esculentum			G P.M.	
8. CROP KIND NAME (Common Name)	Solanaceae	9. DATE OF DETERMINATION		F Filing and Examination Fee:
Tomato (Processing		1990	1	
10. IF THE APPLICANT NAMED IS NOT A "PERSON," GIVE FORM OF ORG			Date Dec. 13,1990	
Corporation		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		Certificate Fee:
11. IF INCORPORATED, GIVE STATE OF INCORPORATION	DATE OF INCORPORATION		\$ 250.00	
	12.		1	Dale Dec . 26,1991
Delaware 13. NAME AND ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, T	O SERVE IN THIS APPLICA	6/29/90		Dec. 26,1771
Margy Orabuena P.O. Box 1480 Hollister, CA 95024-1480  14. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (Formal Section 2) a.    Exhibit A, Origin and Breeding History of the Variety.  b.    Exhibit B, Novelty Statement.  c.    Exhibit C, Objective Description of Variety.  d.    Exhibit D, Additional Description of Variety.  e.    Exhibit E, Statement of the Basis of Applicant's Owners of the Section 2 of the Section 3 o	ship.  Id Sample mailed to Plan "Treasurer of the United GOLD BY VARIETY NAME OF Delow)  STO  17. IF "YES"  VARIETY IN THE U.S.?	t Variety Protection Office States."	e area code):	N BEYOND BREEDER SEED?
19. HAS THE VARIETY BEEN RELEASED, USED, OFFERED FOR SALE, OR  YES (If "YES," give names of countries and dates)  NO  20. The applicant(s) declare(s) that a viable sample of basic s request in accordance with such regulations as may be applicant accordance with such regulations as may be applicant, and stable as required in section 41, and is entitled applicant(s) is (are) informed that false representation he  SIGNATURE OF APPLICANT [Owner(s)]	seeds of this variety wolicable. s sexually reproduced to protection under rein can jeopardize proceed CAPACITY Of Managi	ill be furnished with the a I novel plant variety, and the provisions of section 4 otection and result in pena R TITLE ng Director	l believe(s) t 2 of the Plan	that the variety is distinct, t Variety Protection Act.  DATE  12/4/90
SIGNATURE OF APPLICANT (Owner(s))	CAPACITY OF	RTIFLE		DATE

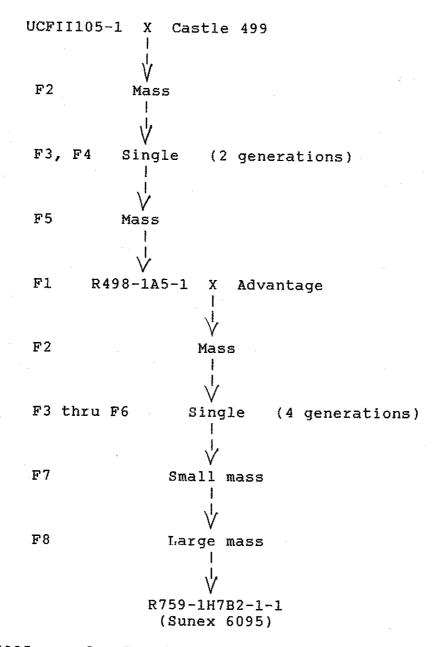
FORM CSSD-470 (5-89) Edition of FORM LS-470, 3-86, is absolute.

SUNSEEDS, DIVISION OF WESTSEEDS, INC.

### EXHIBIT A

### Origin and Breeding History

Sunex 6095



Sunex 6095 was developed by the pedigree method of breeding. The F2 mass of the cross R498-1A5-1 X Advantage was followed by four generations of single plant selection, then two generations of mass selection.

Sunex 6095 has been stable and uniform through three years of cultivar testing.

SUNSEEDS, DIVISION OF WESTSEEDS, INC.

### EXHIBIT B

### Novelty Statement

Sunex 6095 is a distinctly unique processing tomato cultivar, and does not closely resemble any single named cultivar.

Vine type and earliness are most similar to Nema 1200, an early maturing F1 hybrid. Fruit type is most similar to Apex 1000, whereas soluble solids, viscosity, and pH characteristics are most similar to Advantage. Sunex 6095 carries resistance to <u>Fusarium</u> wilt race 2, a unique and very useful characteristic for an early maturing open-pollinated cultivar.

# 1989 Sunseeds Processing Quality Tests (Averages of 9 trials, California)

Cultivar	Soluble solids	рн	Juice Bostwick (Viscosity)	
Sunex 6095	6.2	4.42	15.3	
Advantage	6.1	4.40	14.0	

Sunex 6095 is unique due to its excellent processing quality characteristics (high soluble solids and viscosity) in an early (110 days from emergence), open-pollinated cultivar. Other novel features for an early cultivar include good peelability, firmness, and high color.

### Supplemental Information

Cultivar	Maturity	Shoulder Color	Pedicel Attachment	Fruit Shape
Sunex 6095	Early	Uniform	Jointed	Deep round
Nema 1200	Early	Green	Jointed	Blocky
Apex 1000	Mid	Green	Jointless	Deep round
Advantage	Late	Uniform	Jointless	Rough blocky

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
LIVESTOCK, MEAT, GRAIN AND SEED DIVISION
PLANT VARIETY PROTECTION OFFICE
BELTSVILLE, MARYLAND 20705

EXHIBIT C (Tomato)

### **OBJECTIVE DESCRIPTION OF VARIETY**

TOMATO (Lyco	opersicon esculentum Mill.)	
NAME OF APPLICANT(S)	TEMPORARY DESIGNATION	VARIETY NAME
Sunseeds - Division of Westseeds, Inc.	Sunex 6095	Sun 6095
ADDRESS (Street and No., or R.F.D. No., City, State, and Zip Code)		FOR OFFICIAL USE ONLY
2320 Technology Parkway		PVPO NUMBER
Hollister, Ca 95023		9100045
Choose responses for the following characters which best fit your variety.	Complete this form as fully as po	ssible for best characterization of the variety.
When a single quantitative value is requested (e.g., fruit weight), your answarces when necessary (e.g., 0 9 or 0 8 1, etc.). The apwariety of the same type (see list of recommended check varieties below), plants grown under normal conditions of culture for the variety. Indicate Trials direct-seeded or transplanted staked or unHarris Fms, Fresno Co., CA, 2/9/90; Proseno Joaquin Co., CA, 4/30/90; Tom Barat	wer should be the mean of an adequation of a check whether trial data are astaked X. Give locations an ice Giffin Rch, Fresn	uate-sized, unbiased sample of plants. Use leading d with at least one well-known standard check characters on this form should be described from from greenhouse or field plantings and dates of seeding and transplanting here: to , Co., CA, 1/29/90; Jim Nilsson
Yolo Co., CA, 5/12/90.	ndis, Sacramento co.,	CA, 3/10/903 Don Deeman,
COMPARISONS SHOULD BE MADE TO ONE OR MORE CHECK VAR. OF THE CHECK IN BOXES WHERE IDENTITY OF CHECK IS REQUE.	IETIES IN THE FOLLOWING LIS STED.	ST, IF AT ALL POSSIBLE. ENTER THE NUMBER
1 = Ace 55 VF 7 = Homestead 24 2 = Campbell 37 8 = Marglobe 3 = Chico III 9 = Murietta 4 = Flora Dade 10 = New Yorker 5 = Florida MH-1 11 = Ohio MR-13 6 = Heinz 1350 12 = Red Cherry Large	13 = Red Rock 14 = Roma VF 15 = Rutgers 16 = Sunray 17 = Tropic 18 = UC 82	19 = VF 134 20 = US 28 21 = VF 145 B 7879 22 = Other (Specify)NEMA 1200
1. SEEDLING:  2 Anthocyanin in hypocotyl of 2-15 cm, seedling: 1 = Absen  2. MATURE PLANT (at maximum vegetative development):  2 Growth: 1 = Indeterminate 2 = Determinate  3 Form: 1 = Lax, open 2 = Normal  1 Size of canopy (compared to others of similar type):  1 Habit: 1 = Sprawling (decumbent)	0 5 5 Cm. He  3 = Compact 4 = Dwarf  1 = Small 2 = Medium	5 = Brachytic
3. STEM:  3 Branching: 1 = Sparse ('Brehm's Solid Red', 'Firebate 1 Branching at cotyledonary or first leafy node: 1  2 No. of nodes below the first inflorescence: 1 = 1-4  2 No. of nodes between early (1st - 2nd, 2nd - 3rd) inflorescence: 3 Pubescence on younger stems: 1 = Smooth (no long 3 = Moderately hair	2 = Absent  2 = 4-7  3 = 7-10  1 No. of ag hairs)  2 = Sparsely	Westover') 3 = Profuse ('UC 82')  4 = 10 or more  nodes between later-developing inflorescences.  hairy (scattered long hairs) hairy or wooly
4. LEAF (mature leaf beneath the 3rd inflorescence):		
Type: 1 = Tomato 2 = Potato ('Trip-L-Crop')	2 Morphology (choose illustrate	ion on pg. 5 of this form that is most similar)
Margins of major leaflets: 1 = Nearly entire 3 = Deeply toothed	2 = Shallowly to or cut, esp. towards base	othed or scalloped
Marginal rolling or wiltiness: 1 = Absent 2 = Slight	3 = Moderate 4 = St	rong
Onset of leaflet rolling: 1 = Early-season	2 = Mid-season	3 = Late season

FORM LMGS-470-55 (2-82)

4. LE/		nature leaf beneath the		ontinued):				
	2	Surface of major leaf	flets: 1	= Smooth	2 = 1	Rugose (bumpy or ve	iny)	
	2	Pubescence: 1 = S	mooth (no long hairs)	2 * Normal		3 = Hirsute	4 = Wooly	
5. INF	LOR	ESCENCE (make obse	ervations on 3rd inflor	escence):				
<u> </u>		Туре:	1 = Simple 2	= Forked (2 major ax	es) 3 = (	Compound (much bra	nched)	
0	5	Number of flowers in	n inflorescence, averag	e				
		Leafy or "running" i	nflorescences: 1	= Absent	2 ≖ Occasional	3 = Frequen	t	
6. FLC	WEF	•						
	3	Calyx:	: I ≖ Normal, lobes awl-	shaped	2 = Macrocalyx, lo	bes large, leaflike	3 = Fleshy	
	1	Calyx-lobes:	= Shorter than corol	la. 2 = Ap	prox, equalling cor	rolla 3 = D	istinctly longer than coroll	a
	2	Corolla color: 1	= Yellow 2	≖ Old gold	3 = White or tan			
	2	Style pubescence:	1 = Absent	2 = Sparse	3 = Dense			
	1	Anthers:	= All fused into tube	2 = Sep	arating into 2 or m	nore groups at anthes	i <b>š</b>	
	1	Fasciation (1st flower	of 2nd or 3rd inflore	scence): 1 = Abs	sent 2 = 0	ccasionally present	3 = Frequently pre	sent
7. FRU	JIT (:	3rd fruit of 2nd or 3rd	cluster): For the firs	t 5 characters below, r	natch your variety	with the most simila	r illustration on pg. 5 of th	is form.
	4	Typical fruit shape:	المستبا	Shape of transverse s			of stem end:	
			3	Shape of blossom en	d:	1 Shape	of pistil scar:	
<u> </u>			لـــا ـــــــــــــــــــــــــــــــــ					·
- 1	1	Abscission layer:	1 = Present (pedicella)	te) 2 = Absent (joint	less) 2 Poin	t of detachment of fi	ruit at harvest: 1 = At ped	icel joint
								x attachment
0 5	8 4		eli(from joint to calyx	<u></u>	<u> </u>			
			e fruit (stem axis) .	[ V]		length, check var. no	<u></u>	N120
0 5	2	mm diameter of frui		[0]		diameter, check var.	L	<u> </u>
7	2	g weight of mature f	ruit		8 6 gwe	eight, check var. no.	· · · · · · <u>L</u> 2	2 2
	2	No, of locules:	1 = Two	2 = Three and four	3 = Five	or more		
	1	Fruit surface:	. 1 = Smooth	2 = Slightly rough	3 = Mod	lerately rough or ribb	ed	
Ī	4	Fruit base color .	- 1 = Light green ('L	anai', 'VF145-F5')	2 = Ligh	t gray-green ('Westov	er')	
		(mature-green stage):	3 = Apple or medic 5 = Dark green	ım green ('Heinz 1439	VF') 4 = Yello	ow green		
Г	1	Fruit pattern	1 = Uniform green	2 =	Green-shouldered	· · · · .	3 = Radial stripes on side	s of fruit
_ 		(mature-green stage):			*	·		
Ļ	_	Shoulder color if diffe	erent from base:	1 = Dark green	2 = Grey gre	een 3	= Yellow green	
Ŀ	5	Fruit color, full-ripe:	1 = White 6 = Brownish	2 = Yellow 7 = Greenish	3 = Orange 8 = Other (Spec	4 = Pink	5 = Red	·
	3	Flesh color, full-ripe:	1 = Yellow	2 = Pink	3 = Red/Crimso	on 4 = Orange	5 Pother (Specify	<i>j</i> ) .
		Flesh color:	1 = Uniform	2 = With lighter and o	darker areas in wall	s E	DEC 1 =	
[3		Locular gel color of ta	ble-ripe fruit:	1 = Green	2 = Yellow	3 = Red	PI 4 3 1990 D	[-9]
2		Ripening:	1 = Blossom-to-stem	n end 2 =	Uniform	187	Maly	

FORM LMGS-470-55 (2-82)

9100045

	<del></del>	····		· · · · · · · · · · · · · · · · · · ·	7100010
7. FR	UIT (3rd fruit of 2nd or Ripening:	r 3rd cluster): Continued  1 = Inside out	2 = Uniformly	3 = Outside in	1 Stem scar size: 1 = Small ('Roma')
2	Epidermis color:	1 = Colorless	2 = Yellow		2 = Medium ('Rutgers') 3 = Large
	Epidermis:	1 = Normal	2 = Easy-peel		1 Core: 1 = Coreless (absent or smaller than 6×6 mm) 2 = Present
3	Epidermis texture:	1 = Tender	2 = Average	3 = Tough	
3	Thickness of pericarp		3	Thickness of period	earp, check var. no. 2 2 N1200
		t = Under 3 mm	2 = 3-6 mm	3 = 6-9 mm	4 = Over 9 mm
8. RE	SISTANCE TO FRUIT	DISORDERS (Use code: 0	= Unknown, 1 = Sus	ceptible, 2 = Resistant	
	Blossom end rot	2 Catface		0 Fruit pox	0 Zippering
	Blotchy ripening	0 Cracking	g, concentric	Gold fleck	Other (Specify)
0	Bursting	0 Cracking	, radial	0 Graywall	·
					TE: If claim of novelty is based wholly or in substantial
		, trial data should be append :k varieties grown in the trial			ting, the reaction of the application variety, and
	VIRAL DI	SEASES:			
	0			Г	0
	O Curly top	nosaic		mosaic, Race 0 L	Tobacco mosaic, Race 2 <sup>2</sup> Tomato spotted wilt
	0 Potato-Y vire	us		mosaic, Race 2	0 Tomato yellows
. :	Other virus /				
		AL DISEASES:			
				0	
		nker (Corynebacterium mic	higanense)	0	anthomonas vesicatorium)
	Bacterial so	ft rot (Erwinia carotovora)		Bacterial wilt, <i>(Ps</i>	eudomonas solanacearum)
	U Bacterial spo	eck (Pseudomonas tomato)	L	Other bacterial di	sease (Specify)
٠	FUNGAL	DISEASES:		_	
	0 Anthracnose	e (Colletotrichum spp.)	<u>o</u>	Leaf mold, Race	1 (Cladosporium fulvum)
		rot or corky root, eta lycopersicil	0	Leaf mold, Race	2
	0 Collar rot or	r stem canker,	0	릪	
	(Alternaria s		0	Leaf mold, other	races (Specify)
	0 Early blight (Alternaria s	· · · · · · · · · · · · · · · · · · ·			
	2 Fusarium wi	ilt, Race 1, um f. lycopersici)	0	Nailhead spot (A/	ternaria tomato)
	2	•	0	Septoria leafspot	S. lycopersicil
	Fusarium wi		0	Target leafspot (C	orynespora casiicola)
		·	2	Verticillium wilt,	Race 1 (V. albo-atrum)
	Gray leaf sp	ot (Stemphylium spp.)		Verticillium wilt, i	Race 2
	0 Late blight, (Phytophtho			 Other fungal disea	se
	0 Late blight,	Race 1		Other fungal disea	se

9. DISEASE AND PEST REACTION (Use code	: 0 = Not tested, 1 = Susce	ptible, 2 = Resistant Cont	inued)	<b>₩</b>			
INSECTS AND PESTS:			Querra et e				
Colorado potato beetle (Leptinotarsa decemlineata)  [0] Tomato hornworm (Manduca quinquemaculata)							
Southern root knot nematode (Meloidogyne incognita) 0 Tomato fruitworm (Heliothis zea)							
O Spider mites (Tetranychus spp.)	0 Whit	efly (Trialeurodes vaporario	orum)				
O Sugar beet army worm (Spodoptera exigu	Othe	t (Specify)		· ·			
Tobacco flea beetle (Epitrix hirtipennis)			<u> </u>	····			
POLLUTANTS:							
0 Ozone 0 Sulfur diox	ide Othe	r (Specify)					
10. CHEMISTRY AND COMPOSITION OF FU Canners Assn. Bull. 27-L. Please specify ter for at least one well-known check variety of	it methods or give a referei	nce to methods used. Fill	in table below with values	for the new variety and			
	SUBMITTED VARIETY	Check Variety Advantage	Check Variety E9208	Check Variety			
эн	4.42	4,40	4.40				
Fitratable acidity, as % citric							
Total solids (dry matter, seeds and skin removed)							
Coluble solids, as OBrix	6.2	6.1	5.3				
11. PHENOLOGY: Express length of developme are used, indicate the base tender of the base tender of the comparation of the comp	mperature used in their calc	ulation here k variety; identify checks by	OC. See paper by Warn y name or by number from	ock under "References"			
	APPLICATION VARIETY	Check variety NEMA 1200	Check varietyE9208	Check variety			
Seeding to 50% flower (1 open flower on 50% of plants)	52	53	59				
Emergence	110 days	110 days	116 days	÷			
Fruiting season: 1 = Long ('Marglobe') 2 = Medium ('Westover') 3 = Short, concentrated ('VF 145') 4 = Very concentrated ('UC 82')							
Relative maturity in areas tested:  1 = Early 2 = Medium early 3 = Medium 6 = Variable (if relative maturity is known to differ by location or environment, please explain on separate sheet).							
2. ADAPTATION: If more than one category ap	plies, list all in rank order.						
0 1 Culture: 1 = Fie		*		•			
	ld 2 = Gr	eenhouse					
			ole-pack canning				
4 = Co	me garden 2 = Fre	esh market 3 = Wh 5 = Other (Specify)	ole-pack canning				
4 = Co	me garden 2 = Frencentrated products t adapted 2 = Ad	esh market 3 = Wh 5 = Other (Specify)	ole-pack canning				
4 = Col  2 Machine hervest: 1 = No  9 1 1 Regions to which adaptation ha 1 = No  5 = Gre 9 + Cal	me garden 2 = Frencentrated products  t adapted 2 = Ad  is been demonstrated: theast 2 = Mic	esh market 3 = Wh 5 = Other (Specify)  apted  I Atlantic 3 =  Ith-central 7 =  pper San Joaquin Valley	Southeast	4 = Florida 8 = Northwest oaquin Valley & deserts			

SUNSEEDS, DIVISION OF WESTSEEDS, INC.

### EXHIBIT D

### Additional Description

Sunex 6095 is an early maturing processing tomato Lycopersicon esculentum L., developed for mechanical harvest. Harvest maturity generally occurs 110 days after emergence.

Plants are determinate and compact, developing a good vine cover, and should generally be planted as twin rows on a bed. Leaves are medium green in color.

Fruits are smooth, deep round and very firm, with medium thick carpel walls and deep red color. Stem and blossom scars are small, and fruits detach fairly easily from jointed pedicels. Immature fruits are uniform yellow-green.

Processing characteristics include high soluble solids, high viscosity, medium pH, and high cominuted and subskin color.

Sunex 6095 is a highly qualified cultivar for the following processed products: whole peel, diced, chopped, ketchup, solids paste, and viscosity paste.

Disease resistance is known to include  $\underline{\text{Verticillium}}$  wilt race 1 and  $\underline{\text{Fusarium}}$  wilt races 1 and 2.

### EXHIBIT E

Variety Sunex 6095 was originated and developed by Gary Campbell. By agreement between employee and company, all rights to any invention, discovery, or development made by an employee are assigned to the company. No rights to such invention, discovery, or development are retained by employee.